



SDG15- LIFE ON LAND

SDG 15: Within the scope of the Life on Land goal, the United Nations aims to ensure the sustainable management of forests, combat desertification, halt and reverse land degradation, and prevent the loss of biodiversity. In line with this goal, the protection, restoration, and sustainable use of terrestrial and inland water ecosystems are among the fundamental priorities. The United Nations also aims to halt deforestation by 2030, restore degraded forests, and substantially increase afforestation worldwide. The protection of mountain ecosystems, the rehabilitation of areas affected by desertification, and the integration of biodiversity into national and local planning processes are also prominent objectives within this scope. Furthermore, access to genetic resources and the fair sharing of benefits arising from the use of these resources are encouraged. Within the framework of SDG 15, it is aimed to end poaching and trafficking of protected species by 2030, reduce the impacts of invasive alien species on ecosystems, and support sustainable livelihood opportunities for local communities for this purpose. Particularly in developing countries, it is aimed to mobilize financial resources for the protection of ecosystem services, while strengthening the fight against illegal wildlife trade at a global level is envisaged. Additionally, the expansion of nature-based solutions and the implementation of policies that protect biodiversity to support sustainable development are encouraged. In this context, the activities of Üsküdar University regarding the SDG 15 label are provided below.

15.2.1- Does your university support and/or organize events aimed at promoting the conservation and sustainable use of land, including forests and wilderness?

Üsküdar University carries out academic and social studies aimed at protecting natural resources, maintaining biodiversity, and increasing animal welfare in line with SDG 15 (Life on Land) goals. The main activities in this scope are as follows:

- **Social Awareness and Animal Rights:** The university views the protection of animals as a social responsibility and draws attention to animal welfare with content such as "Feeding animals also supports psychological development!", emphasizing the psychological benefits of human-nature interaction. This approach is a demonstration of a stance that places the protection of terrestrial life at the center of sustainability principles.
- **Contribution to Legal Legislation and Advocacy:** The university has gone beyond awareness studies and become involved in legal regulation processes. The report "Mizan: Proposals for Legal Changes Regarding Stray Dogs within the Framework of a Covenant with the World," prepared with the signature of Founding Rector Prof. Dr. Nevzat Tarhan, was presented directly to the TBMM (Grand National Assembly of Turkey). This report is a concrete academic contribution aiming to provide protection at the legal level with the emphasis that stray animals are a part of society.
- **Academic Studies and Global Climate Impacts:** Within the scope of scientific studies for the protection of biodiversity, Dr. Tuğba Kaman from the Vocational School of Health Services, Medical and Aromatic Plants Program, participated in the international "Climate Change Summit" held in Azerbaijan. The study titled "Effects of Climate Change on Plant Biodiversity" presented here documents the university's global academic contribution to the protection of terrestrial ecosystems.

Sources:

- News (Animal Welfare): Feeding Animals Also Supports Psychological Development!
- News (TBMM Report): Legal Change Proposals Regarding Stray Dogs from Üsküdar University to TBMM
- News (Biodiversity): Climate Change Reduces Biodiversity



15.2.2- Does your university implement any institutional policy to ensure that food on campus is produced using sustainable agricultural methods?

Our university's sustainability policy for campus food services is based on a holistic approach covering waste management, legal compliance, circular economy, supply chain responsibility, and academic awareness. In this context, used vegetable waste oils originating from campus cafeterias are collected through Ministry-approved and licensed companies; in 2024, a total of 770 kg of waste oil was managed via the Off-Site Processing Method and converted into biodiesel. The process is officially and legally documented with the 2024 Waste Declaration Form, MOTAT records, contracts made with licensed companies, e-mail correspondence, and the EPDK Biodiesel Processing License belonging to the Kolza Biodiesel company. This application prevents waste oils from mixing into nature in an uncontrolled manner, reducing soil and water pollution, thus providing an indirect but strong contribution to the SDG 15 – Life on Land goal.

Our university also prefers to work with suppliers who have sustainability reports and environmental and ethical responsibility through its cafeteria service provider. Companies such as Eker, Filiz Makarna, and Sütaş/Şefet support sustainable food systems with water and energy efficiency, contracted agriculture, and circular production models. This institutional approach is not limited to operational applications but is also supported by academic activities. Through the "Food Technology Company Meetings" event organized by our Food Technology Department, our students are made aware of local production, ethical standards, and sustainable food systems: <https://uskudar.edu.tr/haber/gida-teknolojisi-firma-bulusmalari-1-etkinligi-duzenlendi/47891>. Besides this, public scientific briefings prepared by our university academics strengthen institutional awareness on issues such as the promotion of fresh and minimally processed food, the effects of additives on health and the environment, food safety, and the prevention of microbiological risks:

- [The hidden danger of Frozen Fast Food on health: https://uskudar.edu.tr/haber/dondurulmus-fast-foodun-saglik-uzerindeki-gizli-tehlikesi/57735](https://uskudar.edu.tr/haber/dondurulmus-fast-foodun-saglik-uzerindeki-gizli-tehlikesi/57735)
- [Careful when canning! https://uskudar.edu.tr/haber/konserve-yaparken-dikkat/56755](https://uskudar.edu.tr/haber/konserve-yaparken-dikkat/56755)

In conclusion, our university's sustainability approach to the food system clearly demonstrates that sustainability is integrated into daily practices across the campus through the prevention of pollution by converting waste oils into biodiesel, legal and transparent processes, responsible supply chain preferences, and food safety policies supported by academic expertise.

15.2.3- Does your university work directly to protect and expand existing ecosystems and their plant and animal diversity, especially threatened ecosystems?

Üsküdar University carries out **direct and continuous activities** at both academic and social levels regarding the **protection of biological diversity, sustainable management of ecosystems, and the fight against climate change**. These studies are implemented through scientific presentations, academic evaluations for the public, education programs, institutional policies, and student projects.

Academic and Social Awareness Studies University academics create awareness in society by revealing the effects of climate change on plants, animals, and ecosystems with scientific data.

- The **effects of climate change on plant biodiversity**, the protection of threatened species, and the importance of sustainable agricultural practices were emphasized. <https://uskudar.edu.tr/haber/iklim-degisikligi-biyocesitliligi-azaltiyor/57457>
- The **decline of honey bees** has been addressed in the context of pesticide use, habitat loss, and climate change; the importance of bee-friendly agriculture and habitats has been stated. <https://uskudar.edu.tr/haber/bal-arilari-tehdit-altinda/45132>



- The **effects of climate change on animal populations** have been evaluated in terms of reproduction, migration, and ecosystem balance. <https://uskudar.edu.tr/haber/iklim-degisikligi-hayvanlarin-yasamini-ve-ekosistemleri-tehdit-ediyor/57578>
<https://www.mahalligundem.com/iklim-degisikligi-hayvanlarin-dogum-oranlarini-nasil-etkiliyor/63266/>
- **Forest fires** have been scientifically analyzed in terms of climatic factors and preventive environmental policies. <https://uskudar.edu.tr/haber/kuvvetli-ruzgar-orman-yanginlarini-buyumesine-neden-oldu/56449>
- **Electric vehicles** have been evaluated in terms of environment and human health; the transition to sustainable energy has been scientifically shown to be safe. <https://uskudar.edu.tr/haber/elektrikli-araclarin-yaydigi-radyasyon-ongorulen-limitlerin-altinda-cikti/56907>
- **Cyanide leaks and environmental risks** have been addressed in the context of soil, water, and ecosystem health, and the public has been informed. <https://uskudar.edu.tr/haber/siyanur-sizintileri-cevreyi-ve-halk-sagligini-tehdit-eder-mi/44759>
- The **destructive effects of wars on climate and ecosystems** have been brought to the agenda through international declarations. <https://uskudar.edu.tr/haber/savas-20-ulkenin-yillik-emisyonlarindan-daha-fazla-gezegeni-isitan-gaz-uretti/44223>

Ethical, National, and International Initiatives Üsküdar University Environmental Ethics Forum brings an ethical perspective to environmental management with initiatives such as **Mizan: A Covenant for the Earth**, and spreads the culture of sustainable living. <https://uskudar.edu.tr/haber/veryuzu-icin-bir-sozlesme-mizanin-ilk-adimlari-atildi/48086> <https://uskudar.edu.tr/haber/turkiye-enerji-ve-ekonomik-ihiyaclarini-dikkate-alan-bir-yaklasimi-temsil-etti/43850>

Animal Rights and Local Ecosystem Support The university regularly meets the shelter and nutrition needs of stray animals living on its campuses; it sets an example by institutionally adopting animals. <https://uskudar.edu.tr/haber/uskudar-ailenin-yeni-uyeleri-mico-ve-lucky/56519>

Education Programs and Course Contents Courses conducted within the scope of the Medical and Aromatic Plants Program ensure that students gain environmental awareness on issues such as **organic agriculture, plant ecology, soil protection, biological control, and sustainable production**. <https://sis.uskudar.edu.tr/oibs/bologna/progCourses.aspx?lang=en&curSunit=127>

Institutional Policy and Practices The university conducts systematic studies within the scope of the **Environmental Management Consultancy Contract** for the purpose of compliance with environmental legislation and monitoring environmental impacts.

Projects and Student Contributions Local bird populations were supported with the **Birdhouses on Campus Project**. Numerous **academic and student projects** covering waste management, renewable energy, sustainable agriculture, biodegradable materials, and local flora research contribute directly to the protection of ecosystems.

15.2.4- Does your university offer education programs on ecosystems (wild flora and fauna) for local or national communities?

Üsküdar University carries out multifaceted education and awareness activities at local, national, and international levels for the purpose of protecting ecosystems, sustainable management of biodiversity, and developing environmental awareness. In this context, the university provides direct environmental education to both its students and society through symposiums, workshops, technical and educational trips, laboratory applications, media participation, and student club activities. The active role of academic staff in international climate summits, environmental ethics initiatives, and scientific events



draws attention to the effects of climate change on ecosystems, plant biodiversity, and natural life, and strengthens social awareness.

Specifically, plant ecology, sustainable agriculture, habitat protection, responsible use of natural resources, and eco-friendly production models form the basis of the educational content. Field trips (botanic gardens, herbaria, medicinal plant gardens, industrial facilities) conducted within the scope of the Medical and Aromatic Plants Program ensure that students recognize ecosystems on-site and gain practical awareness for the protection of biological diversity. Furthermore, permanent infrastructures such as the Herbarium Techniques Laboratory and the Medical and Aromatic Plants Laboratory offer important educational environments supporting ecosystem-based learning. The active participation of students in international climate platforms (such as COP Summits) shows that the university's mission of providing environmental sustainability and ecosystem awareness is represented on a global scale. Additionally, nature-based activities carried out through student clubs create awareness in areas such as marine and terrestrial ecosystems, forests, water resources, and animal welfare. All these activities demonstrate that Üsküdar University provides direct and strong contributions to indicator 15.2.4 in line with SDG 15 – Life on Land goals by offering applied and sustainable environmental education not only at the academic level but also for society.

Related Evidence Links:

- Climate Change and Plant Biodiversity: <https://uskudar.edu.tr/haber/iklim-degisikligi-biyocesitliligi-azaltiyor/57457>
- Effects of Wars on Ecosystem and Climate – Gaza Declaration: <https://uskudar.edu.tr/haber/savas-20-ulkenin-yillik-emisyonlarindan-daha-fazla-gezegeni-isitani-gaz-uretti/44223>
- Midwives and Climate Crisis Symposium: <https://uskudar.edu.tr/haber/ebeler-iklim-krizi-cozumunde-onemli-bir-guc/47858>
- COP29 – Medical and Aromatic Plants Program Student Success: <https://uskudar.edu.tr/haber/tibbi-ve-aromatik-bitkiler-programi-ogrencisinden-uluslararası-basari/57452>
- Herbarium Techniques Laboratory: <https://uskudar.edu.tr/herbaryum-teknikleri-laboratuvari>
- Medical and Aromatic Plants Laboratory: <https://uskudar.edu.tr/tibbi-ve-aromatik-bitkiler-laboratuvari>
- Student Club Ecosystem and Sustainability Activities: https://uskudaredutr-my.sharepoint.com/:x/r/personal/sustainability_uskudar_edu_tr/_layouts/15/Doc.aspx

15.2.5- Does your university offer education programs/outreach programs to local or national communities on the sustainable management of land for agriculture?

Üsküdar University carries out direct and indirect education, promotion, and cooperation activities for communities on **sustainable land management, protection of biodiversity, and sustainable agricultural practices**. These activities support information transfer on sustainable land and natural life management in both academic platforms and local-social applications.

Academic presentations and international awareness:

- In 2024, Dr. Tuğba Kaman, a faculty member of the SHMYO Medical and Aromatic Plants Program, participated online in the **Climate Change Summit** held in Azerbaijan and gave a presentation titled “Effects of Climate Change on Plant Biodiversity”. In the presentation, sustainable management issues such as **developing climate-resistant species, sustainable irrigation, protected areas, and organic agriculture** were emphasized. <https://uskudar.edu.tr/haber/iklim-degisikligi-biyocesitliligi-azaltiyor/57457>
- In the same context, Prof. Dr. İbrahim Özdemir, Director of the Üsküdar University Environmental Ethics Platform, discussed **sustainable land and resource management** issues in a panel where he shared the concept of “Mizan: A Covenant with the Earth” with young



leaders at the **New York AFS Youth Assembly** program. <https://uskudar.edu.tr/haber/new-york-genclik-meclisi-programinda-mizan-ele-alindi/56472>

Applied trainings and field trips: The university organized field trainings for students to support the protection of biodiversity and agricultural ecosystem health, which form the basis for sustainable land management:

- **April 16, 2024 – Visit to Zeytinburnu Medicinal Plants Garden:** On-site observation of sustainable agricultural practices and the protection of local ecosystems.
- **May 16, 2024 – Visit to Nezahat Gökyiğit Botanic Garden:** Introduction of endemic and rare species and the importance of habitat protection. These trips contribute to students gaining knowledge and awareness, while also supporting the environmental education mission of the visited gardens in society (especially **Nezahat Gökyiğit Botanic Garden is a public environmental education center**).

Local application and promotion support: The “**Solid Cosmetics Workshop**” organized within the scope of the 25th Merkez Efendi Traditional Medicine Festival conveyed sustainable land and natural resource management principles such as **water saving**, **reduction of plastic waste**, and **eco-friendly production** to the local community. The university also indirectly conveys organic fertilizer production and sustainable soil management to society through students via a **technical trip to the İSTAÇ Compost and Recovery Facility**.

Academic publications and projects: The academic article titled “**Antioxidant, antidiabetic effects of propolis obtained from Siirt province of Turkey...**” conducted by university instructors provides scientific support to the local economy and sustainable production by revealing the scientific value of local agricultural products. <https://pubmed.ncbi.nlm.nih.gov/38628175/> (DOI: 10.1002/fsn3.3958). Additionally, the project “**Using Next Generation Sequencing and Spectroscopy in Heat Stress during Barley Seed Development...**” carried out within the scope of research projects forms the scientific basis for climate-change-resistant agricultural strategies (Üsküdar University R&D).

Academic education programs: The courses “**Ecology**”, “**Environment and Organic Agriculture**”, and “**Plant Protection**” in the university curriculum directly convey the principles of sustainable land management to students and ensure they are raised to carry this knowledge to the national community as graduates.

Student Club Activities: Nature-based activities organized by student communities (e.g., “Seed Ball Workshop from Nature”) create awareness of sustainable land management in the public through practices that protect local seeds, combat erosion, and reduce chemical use. https://uskudaredutr-my.sharepoint.com/:x:/r/personal/sustainability_uskudar_edu_tr/_layouts/15/Doc.aspx

15.2.6- Does your university offer education programs/outreach programs to local or national communities on the sustainable management of land for tourism?

Üsküdar University carries out awareness, education, and capacity-building activities for local and national communities on the sustainable management of lands used for tourism purposes (coastal, marine, natural, and cultural areas). In this context, the university supports the dissemination of sustainable tourism management principles through technical trips organized via student clubs, academic briefing studies, sector-oriented education programs, and institutional structures.

Among the activities organized by student clubs, the EcoVision Club's “**Discovery of the Marine Ecosystem in the Princes' Islands**” event was held in the Princes' Islands, one of Istanbul's important tourism destinations, allowing the on-site examination of the sensitivity of coastal and marine ecosystems under tourism pressure. Through this event, participants observed the effects of problems such as marine pollution, biodiversity loss, and waste management on sustainable tourism and understood the importance of ecotourism principles for the long-term protection of tourist areas. Similarly, the “**Bursa Ecology and History Technical Trip**” event practically addressed the necessity of



protecting cultural heritage and ecological values together and in balance in a destination with intense cultural and natural tourism potential; this contributed to students gaining awareness in sustainable tourism and environmental impact management and transferring this knowledge to the national community in the future.

The university contributes directly to sustainable tourism management by offering its academic knowledge for the benefit of the public. Public statements by Dr. İnci Karakaş from Üsküdar University Vocational School of Health Services regarding increased environmental pollution during holiday periods drew attention to the long-term effects of solid waste, water, and soil pollution on tourism areas; she directly conveyed sustainable tourism principles to the national community by offering practical suggestions such as preferring eco-friendly facilities, reducing waste, and increasing social environmental awareness.

Furthermore, the university carries out professional education and capacity-building activities for the national community to support sustainable management in the tourism sector. The Health Tourism Workshop, organized in cooperation with the Health Tourism Application and Research Center (SATUMER) and the Continuing Education Center (ÜSEM), aimed to bring together national stakeholders such as clinics, tourism agencies, and health institutions to develop qualified human resources in the sector and increase service quality. The institutional continuity of such activities is guaranteed by the SATUMER Regulation, which defines the university's education, research, and consultancy powers in the field of health tourism. Additionally, the "Health Tourism Training (ÜÜ-EMP-USHAŞ)" program, an education activity carried out by SATUMER, directly supported the sustainable and quality management of tourism services by being delivered to sector professionals through national stakeholders connected to USHAŞ and the Ministry of Health.

University education activities are also supported at the curriculum level; within the scope of the Health Tourism course in the Bologna Information System, areas such as thermal, medical, and accessible tourism are addressed from a sustainability perspective, and the balanced management of areas for tourism purposes in terms of environmental, economic, and social aspects is conveyed to students. The university also shows high-level participation in promotion and awareness studies for the protection of areas with nature and health tourism potential. Founding Rector Prof. Dr. Nevzat Tarhan's participation in the 2024 Traditional Medicine Festival held at the Zeytinburnu Medicinal Plants Garden is a concrete indicator of institutional support given to tourism areas managed with biodiversity protection and sustainable land use principles. Additionally, the participation of Medical and Aromatic Plants Program Head Dr. Tuğba Kaman with her students in the Aromatherapy Festival held in Balıkesir, along with the seminars and workshops held there for sustainable agricultural practices, ensured the direct transfer of information regarding the conscious management of natural and tourism-oriented lands to national communities. These holistic activities clearly reveal Üsküdar University's commitment to education, awareness, and capacity building for local and national communities regarding the sustainable management of lands used for tourism purposes.

15.3.1- Does your university follow a policy to ensure the conservation, restoration, and sustainable use of terrestrial ecosystems associated with the university, especially forests, mountains, and drylands?

Üsküdar University has adopted the conservation, restoration, and sustainable use of terrestrial ecosystems as an integral part of its institutional mission and vision; in this direction, it has clear and written policies that integrate environmental sustainability into all academic, administrative, and social activities. The university's Sustainability Policy and Environmental Policy define the protection of natural areas, the maintenance of biological diversity, the sustainable management of ecosystems, and the expansion of green campus practices as fundamental goals (<https://cdn.kalite.uskudar.edu.tr/content/files/surdurulebilirlik-politikasi-251006044428.pdf>; <https://kalite.uskudar.edu.tr/politikalar>). These policies are shaped in line with the United Nations



Sustainable Development Goals (especially SDG 15), national environmental legislation, and scientific data, emphasizing that environmental problems should be handled with ethical, sociological, and cultural dimensions as much as technical ones.

Üsküdar University's pioneering approach in this field has materialized with the establishment of Turkey's first and only “Environmental Ethics Platform”; awareness events organized through the platform, published academic reports, and studies presented to policymakers (for example, the book *Mizan: A Covenant with the World* published in collaboration with UNEP) have demonstrated the university's sustainability vision based on environmental ethics (<https://almizan.uskudar.edu.tr/uploads/files/643d98c722f0ddunya-cevre-sozlesmesi-mart-2023-1.pdf>). This institutional commitment to the protection of terrestrial ecosystems has been given an institutional structure with the Üsküdar University Sustainability Coordinatorship Directive, which came into force with the Senate Decision dated 12.09.2024. The directive's fields of activity explicitly include “sustainable land management” and “protection and sustainable use of biological diversity and ecosystem”; by giving the task of coordination and commission formation in these areas to the Coordinatorship, the university's SDG-compliant environmental management policy is formalized (<https://uskudar.edu.tr/assets/uploads/sayfa/18/file/uskudar-universitesi-surdurulebilirlik-koordinatordugu-yonergesi.pdf>).

The university's approach at the policy level is also supported by international reporting and monitoring mechanisms. Üsküdar University regularly submits data to the UI GreenMetric World University Rankings; in the prepared Green Campus (GreenMetric) reports, it clearly declares its commitments to the protection of ecological areas in the campus area, monitoring of biodiversity, and prevention of land degradation (<https://cdn.kalite.uskudar.edu.tr/content/files/greenmetric-sunumu-yesil-kampus-251008105502.pdf>). These policies are also integrated with the education and research infrastructure. In the course contents of various academic programs, especially the Environmental Health Program, environmental policies, sustainability, ecosystem protection, and environmental legislation issues are covered; with courses on ecology, environmental toxicology, and sustainable plant protection approaches, it is aimed for students to be raised as competent individuals in the protection and sustainable use of terrestrial ecosystems (<https://cdn.uskudar.edu.tr/uploads/files/2020/07/22/cevresagligi-2020-2021-ders-icerikleri.pdf>). As explicitly stated in the university's Strategic Plan and Environmental Analysis Report, these policies do not remain only at the theoretical level; they are reflected in practice through forest restoration studies, afforestation activities, academic contributions to fire prevention strategies, and field activities conducted through environmental clubs. This holistic structure strongly demonstrates that Üsküdar University has a clear, written, institutionalized, and multidimensional policy framework for the conservation, restoration, and sustainable use of terrestrial ecosystems.

15.3.2- Does your university implement a policy to identify, monitor, and protect IUCN Red List species and species on national conservation lists with habitats in areas affected by its activities?

Our university's official commitment to the identification, monitoring, and protection of species on the IUCN Red List and national conservation lists in habitats affected by our university's activities is supported holistically through environmental policies, legal compliance processes, institutional management systems, and academic infrastructure. In our Environmental Policy, the protection of biological diversity is adopted as a fundamental principle, and the planning and implementation of nature-friendly landscape practices that observe ecosystem balance in campus areas are essential.

All waste, especially hazardous, medical, and laboratory waste generated within the university, is collected separately at the source in accordance with national legislation, stored in temporary storage areas, and dispatched to be disposed of through licensed companies; these processes are monitored by being reported to the Ministry of Environment, Urbanization and Climate Change via the MOTAT system. These practices contribute directly to the protection of biological diversity by preventing



environmental pollution and risks to sensitive habitats. Within the scope of wastewater management, according to the official opinion received from İSKİ, it has been confirmed that the wastewater resulting from university activities is not of an industrial nature but only domestic wastewater; all wastewater is discharged into the İSKİ sewage system in accordance with the legislation and treated at the Üsküdar Wastewater Treatment Plant. This situation reveals that there is no risk of heavy chemical pollution in terms of aquatic ecosystems and protected species. Furthermore, with the Environmental Permit Opinion received from the Provincial Directorate of Environment and Urbanization, it has been officially documented that the university's educational activities do not fall within the scope of Annex-1 and Annex-2 of the Environmental Permit and License Regulation (ÇİLY), and therefore do not create a high environmental risk in terms of air emission, wastewater discharge, and noise. Despite this, our university continues its obligation to comply with all environmental legislation and take measures to protect the environment and human health with a proactive approach without being subject to an environmental permit.

Regarding the management of hazardous substances, risks regarding the possession, transportation, and management of hazardous substances have been taken under control within the legal framework with the Hazardous Goods Safety Consultancy (TMGD) Service Contract; monitoring, recording, and emergency mechanisms have been created for possible accidents, leaks, and environmental effects. These processes ensure the minimization of risks that could threaten biological diversity. Within the scope of the Environmental Management Consultancy Contract, which is carried out to constantly monitor environmental impact and guarantee compliance with legislation, regular audits, reporting, and improvement studies are carried out on more than 25 environmental legislation topics that can have an effect on biological diversity, such as waste management, water and soil pollution control, and management of hazardous substances.

Our university's policy approach is also supported by education and research activities. Through courses such as Environmental Toxicology, Ecology, and Disease and Pest Management in Medical and Aromatic Plants, students gain scientific knowledge and awareness of ecosystem health, environmental threats, and protection strategies. In addition to this, application and research centers operating within the university form the institutional basis for identification, monitoring, and scientific support mechanisms for the protection of biological diversity. Specifically, ÜSGÜMER (Occupational Safety, Occupational Health and Environmental Health Application and Research Center) offers a concrete infrastructure for the identification and monitoring of environmental pollutants with its environmental health laboratories and standard measurement-analysis capacity. BİYOTEKMER and TRGENMER contribute to the protection of genetic diversity of species, understanding of adaptation mechanisms to environmental stress factors, and development of science-based protection strategies through genetic and biotechnological research. Studies carried out by GETİPMER also provide indirect support for the sustainable use and protection of natural resources and especially medicinal plants. All these policy, application, education, and research components reveal that our university's commitment to protecting the habitats of species in the IUCN Red List and national protection lists is not just a policy statement, but a management system that is traceable, documentable, and continuously improved.

Links to relevant application and research centers:

- ÜSGÜMER (<https://uskudar.edu.tr/usgumer>)
- BİYOTEKMER (<https://uskudar.edu.tr/biyotekmer>)
- TRGENMER (<https://uskudar.edu.tr/trgenmer>)
- GETİPMER (<https://uskudar.edu.tr/getipmer>)



15.3.3- Does your university, as an institution, include local biodiversity in any planning and development process (e.g., construction of new buildings)?

Üsküdar University adopts environmental sustainability and the protection of local biodiversity as an institutional necessity in the construction of new buildings and all development processes; this approach is secured by the university's official Environmental Analysis Report and Environmental Policy. The protection of biological diversity is accepted as one of the fundamental principles of environmental planning and applications, and nature-friendly landscape applications are essential in campus areas. Within the scope of the university's 2024–2028 Strategic Plan, it is aimed for new buildings to be designed with a green building understanding, using heat-insulated construction materials that increase energy efficiency, LED lighting, smart building systems, and photocell faucets for water saving. With the Solar Energy System (GES) installed on campus, a part of the building electricity need is met from renewable sources, reducing the carbon footprint. A zero-waste approach has been adopted in development and construction processes; specifically, environmental pollution risks have been taken under control by the safe disposal of laboratory and medical waste. All campuses of the university are continuously monitored within the scope of the Environmental Management Consultancy Contract, and full compliance with national environmental legislation is ensured. Furthermore, through the Sustainability in Environmental and Business Management (ISG365) course, environmental impact assessment, green building certification systems, and sustainable planning approaches are conveyed to students; thus, qualified human resources who will support eco-friendly construction are raised. This holistic structure shows that the university has created a sustainable campus model based on protecting local ecosystems and biodiversity while continuing its physical development.

Related Links:

- Üsküdar University Strategic Plan (2024–2028): <https://uskudar.edu.tr/assets/uploads/sayfa/526/file/uskudar-universitesi-stratejik-plan-2024-2028.pdf>
- Environmental Management Consultancy Contract: (Institutional document)
- ISG365 Course Information: (Within the scope of the program curriculum)

15.3.4- Does your university implement a policy to reduce the impact of alien species on campus?

Our university's policy for the protection of biological diversity on campus and reducing the impact of alien (invasive) species is concretely proven by planned and recorded operational applications supported by institutional environmental commitments. In this context, harmful pest and alien species populations are regularly monitored across the campus (including forested areas, greenhouses, and all internal and external structures), periodic pest station controls are made, and all applications are recorded with official reports. The type and amount of chemical substances (e.g., Alphanext, Rodentox) used in pest control activities are clearly reported, thus environmental risks are managed in a controlled manner. The fight is not limited to chemical methods; physical and structural measures (such as fly screen applications, door bottom brushes, keeping drain covers closed, and repairing structural cracks) aimed at preventing the spread of alien species are also reflected in reports as suggestions and applications. All these activities are carried out within the framework of relevant Directorate permissions and legal obligations, ensuring institutional audit and transparency (Evidence: Pest Control Application Reports – Internal/External Area and Forested Area Pest Station Controls).

This operational approach is directly compatible with the principles of “protection of biological diversity” and “adoption of nature-friendly landscape applications” in the university's Environmental Policy and aims to prevent the spread of alien species by preferring local (endemic) species (Evidence: Environmental Analysis Report, p.32). Additionally, the Medical Waste Management Plan, implemented to prevent the spread of alien pathogens and biological risks to the ecosystem, creates an indirect but critical protection mechanism for biological diversity by ensuring the separation of wastes at the source, their safe storage in cold chains, and final disposal through licensed companies (Evidence:



Medical Waste Management Plan, İSTAÇ disposal records). This policy of the university is also supported by Environmental Toxicology, Ecology, Sustainability, and Pest Management courses given in undergraduate programs, guaranteeing the training of qualified human resources who can recognize the environmental effects of alien species and develop sustainable management strategies (Evidence: Course Information Packages – ISG365, CEV128, CEV230, TAB216).

15.3.5- Does your university collaborate with the local community, for example through partnerships, to protect shared land ecosystems?

Our university implements the protection of biological diversity and shared land ecosystems through collaborations developed with local, national, and international stakeholders along with sustainability-based institutional policies. This approach has been shaped in line with the goals of social contribution, sustainable development, and transfer of expertise to the public in the Üsküdar University Strategic Plan. The university aims to address environmental problems not only within campus boundaries but on the scale of shared ecosystems by working together with public institutions, local governments, non-governmental organizations, and academic networks.

In this framework, the Environmental Ethics Platform, established in line with the environmental ethics approach emphasized in the Environmental Analysis Report, contributes to increasing social awareness of climate change, biological diversity loss, and environmental risks by creating an interaction space between scientists and policymakers. The university's academic expertise is shared on national and international platforms on issues such as the effects of climate change on plant biodiversity, ecosystem restoration, organic agriculture applications, and community-based environmental education; these shares strengthen the capacity for joint solution production thanks to collaborations developed with different universities and institutions.

Our university also transforms academic knowledge into social benefit in the face of environmental risks threatening shared ecosystems, such as forest fires. Evaluations made by academics contribute to the development of strategies that can be implemented together with local governments and relevant institutions by offering concrete suggestions for fire prevention, land management, local community participation, and the use of technological monitoring systems. Similarly, scientific studies conducted on urban environmental risks such as electromagnetic pollution aim to evaluate common risk areas in terms of environmental sustainability and human health with scientific data and to inform the public correctly.

The university also contributes to the protection of ecosystems through direct collaborations established with local communities. Thanks to applied activities carried out with municipalities, public organizations, botanical gardens, herbaria, industrial organizations, and non-governmental organizations, students and academics find the opportunity to experience soil health, sustainable consumption, waste reduction, protection of local and endemic species, and ecosystem-friendly production processes on-site. Afforestation studies and memorial forest applications demonstrate the university's determination to contribute directly to natural ecosystems. This multi-stakeholder and application-oriented approach was strengthened at the institutional level with the Climate Ambassador application carried out within the scope of the 2024–2025 Academic Year. Through the Climate Ambassador, the university increases coordination with local governments, public institutions, and non-governmental organizations in the field of environment and climate change; it adopts a participatory governance model for the protection of shared ecosystems through social awareness, education, and joint projects. This holistic structure shows that the university handles environmental sustainability not only as an institutional goal but as a shared responsibility area carried out with society.

Institutional Documents

- Üsküdar University Strategic Plan (Pages 7, 8, 69, 96, 109, 138)
- Environmental Analysis Report (Page 32)
- 2024–2025 Academic Year Climate Ambassador Appointment and Activity Documents



Academic and Social Activities

- Academic events and summit participation on Climate Change and Biodiversity: <https://uskudar.edu.tr/haber/iklim-degisikligi-biyocesitlili-azaltiyor/57457>
- Expert evaluations for the protection of forest fires and shared ecosystems: <https://uskudar.edu.tr/haber/kuvvetli-ruzgar-orman-yanginlarini-buyumesine-neden-oldu/56449>
- Scientific research and public information regarding electromagnetic environmental risks: <https://uskudar.edu.tr/haber/elektrikli-araclarin-yaydigi-radyasyon-ongorulen-limitlerin-altinda-cikti/56907>

Local Community and Institution Collaborations

- İSTAÇ and İBB Parks and Gardens Directorate (compost and soil health applications)
- Zeytinburnu Municipality (sustainable consumption and waste reduction workshops)
- Zeytinburnu Medicinal Plants Garden, Nezahat Gökyiğit Botanic Garden, İÜ Faculty of Forestry Herbarium
- Technical trips focused on sustainable production with industrial organizations
- Environmental Organizations Solidarity Association – Üsküdar University Memorial Forest (3,000 saplings)

15.4.1- Does your university, as an institution, have water quality standards and guidelines for water discharge (to protect water quality for the protection of ecosystems, wildlife, and human health and welfare)?

Our university carries out all activities regarding water discharges and water quality in full compliance with current national legislation and local administration regulations in line with the goal of protecting ecosystems, wildlife, and human health. The quality of wastewater originating from campuses has been determined by official evaluations made by relevant administrations; it has been confirmed that the wastewater generated as a result of university activities is not of an industrial nature and is completely domestic in character. This situation reveals that there is no risk of heavy chemical pollution from the university's activities and that environmental impacts are kept under control. The university's domestic wastewater is collected connected to the Istanbul Water and Sewerage Administration (İSKİ) sewage system and treated in relevant wastewater treatment plants. Thanks to this structure, water discharges are managed in accordance with environmental quality standards; the formation of water pollution in receiving environments is prevented. The university's approach to protecting water quality is secured by a discharge system maintained within a transparent, traceable, and legal framework.

Water management processes are not limited only to the fulfillment of legal obligations but are also strengthened with expert support at the institutional level. Within the scope of environmental management consultancy, water pollution control, environmental monitoring, auditing, and reporting activities are carried out regularly in all campuses of the university. In this context, continuous monitoring and internal audit mechanisms are operated for the purpose of compliance with legislation related to water discharges, prevention of pollution risks, and reduction of environmental impacts. The quality of drinking and utility water is controlled at regular intervals to protect human health in campus areas. Especially in health campuses, the compliance of the water obtained through systems where mains water is treated is verified by periodic analysis and safely distributed to different use points across the campus.

Physical measures for water saving are applied across the campus to reduce pressure on water resources and lower the discharge load. Water consumption is taken under control thanks to water-saving faucets, dual-stage reservoir systems, and leak-proof infrastructure applications; possible leaks and infrastructure-sourced pollution risks are prevented with fast intervention and regular maintenance activities. Physical measures taken in rainwater drainage systems contribute to the protection of surface and groundwater quality by preventing solid wastes from mixing into the sewage system. The university



also supports academic knowledge production and solution development activities in the field of water quality and water management. Guidance for national and international research calls ensures the encouragement of scientific studies on issues such as urban water management, water reuse, and resource recovery. Technical standards applied in the laboratory infrastructure and design criteria to reduce the risk of chemical leakage aim to carry out research activities in accordance with environmental safety principles.

Evidences and Links Legal and Institutional Documents

- İSKİ Wastewater Discharge to Sewage Regulation
- İSKİ official opinion letter (09.08.2021 – Üsküdar University Çarşı Campus wastewater evaluation)
- ARTU Environmental Management Consultancy Service Contract (2024–2025)

Policy Documents

- Üsküdar University Sustainability Policy: <https://cdn.kalite.uskudar.edu.tr/content/files/surdurulebilirlik-politikasi-251006044428.pdf>

Official Institution Information

- İSKİ Wastewater Treatment Plants and Sewage System: <https://iski.istanbul/kurumsal/iski-tesisleri/atik-su-aritma-tesisleri/>

Operational and Technical Applications

- Campus drinking and utility water analysis reports (periodic)
- Water saving and infrastructure maintenance records
- Physical leak prevention and drainage control applications

Academic and Research Activities

- Water4All (Water Security for the Planet) 2024 International Call applications and announcements
- Technical specifications regarding analytical laboratory infrastructure

15.4.2- Does your university implement a policy to reduce plastic waste on campus?

Our university carries out its approach to reducing plastic waste across the campus based on full compliance with national legislation, institutional policy documents, and applications integrated into daily operations. This approach does not remain only at the level of environmental awareness but is handled as an integral part of institutional responsibility and sustainable campus management. The basic framework for reducing plastic waste has been shaped in line with the Zero Waste Policy adopted by the university and is implemented to cover all its campuses. In accordance with the Zero Waste Regulation put into force by the T.C. Ministry of Environment, Urbanization and Climate Change, the university established the Zero Waste Management System and was entitled to receive the Basic Level Zero Waste Certificate on June 8, 2021. This certificate shows that applications for reducing waste generation, including plastic waste, their separation at source, and direction to recovery processes are carried out under institutional and legal guarantee. By continuing its continuous improvement approach in this field, the university has positioned reaching the Platinum Certificate, one of the highest level ratings within the scope of the Zero Waste Regulation, among its goals.

Policies aimed at reducing plastic waste are supported by concrete measures applied across the campus. To reduce the use of single-use plastic products, thermos flasks were distributed to academic and administrative staff, and awareness-raising briefings against single-use plastics were included at water dispensers. Thanks to these applications, it was aimed to eliminate the use of plastic cups and reduce plastic consumption in daily operations. Plastic and metal wastes are collected separately at source across the campus and delivered to licensed recovery companies to be managed without harming the environment. The university's plastic waste management is not limited only to reduction applications but is supported by regular monitoring and recording systems. The amounts of plastic and other recyclable wastes are monitored annually through waste tracking charts for the last four years, and these



data are shared transparently with the public. This system reveals that waste producer obligations defined in the Waste Management Regulation are fulfilled and recovery processes are operated effectively. Applications for reducing waste generation, separate collection, and direction to recycling show that environmental responsibility is undertaken at the institutional level in line with the polluter pays principle.

The approach to reducing plastic waste is also strengthened by education and awareness activities. Through “Solid Cosmetics” themed workshops organized by faculty members, products that reduce the use of plastic packaging are introduced, and information on eco-friendly alternatives is shared with students and society. Furthermore, thanks to application trips organized for students to the İSTAÇ Compost and Recovery Facility, waste recovery processes are observed on-site and awareness is increased on how the environmental effects of plastic wastes are reduced. Adopting an integrated management understanding at the institutional level, the university handles the reduction of plastic waste not only as a part of environmental policies but also as a part of administrative and academic processes. Paper consumption is reduced with the active use of the Electronic Document Management System (EBYS); food waste and indirect packaging waste are prevented with procedures applied in cafeteria and storage processes. Through environment and sustainability-oriented courses in academic programs, knowledge of eco-friendly production and recovery technologies is supported. This holistic structure reveals that the university handles the reduction of plastic waste as a fundamental component of institutional culture and sustainability goals, beyond a legal obligation.

Evidences and Links Policy Documents

- Üsküdar University Zero Waste Policy and Documents: <https://uskudar.edu.tr/sifir-atik-belgelerimiz>
- Waste Management Regulation (University internal legislation): <https://uskudar.edu.tr/usgumer/atik-yonetimi-yonetmeligi>

Certification

- Basic Level Zero Waste Certificate (08.06.2021)

Monitoring and Recording Systems

- Waste Tracking Charts (Last 4 years): <https://uskudar.edu.tr/usgumer/atik-takip-cizelgesi>

Applications and Awareness Activities

- Removal of single-use plastics (thermos distribution)
- Separate collection of plastic and metal waste at source
- “Solid Cosmetics” workshops
- İSTAÇ Compost and Recovery Facility application trips

15.4.3- Does your university carry out a policy, process, or practice for waste disposal, including hazardous substances?

Our university carries out its processes for the disposal of wastes, including hazardous substances resulting from its activities, with institutional policies created based on national environmental legislation, defined application procedures, and continuous monitoring mechanisms. This approach is handled within the framework of a risk-based management understanding aiming to protect environmental and human health and is implemented as one of the fundamental components of the university's environmental responsibilities. This structure for hazardous waste management was officially evaluated and verified by the Environmental Analysis Report. Within the scope of the university's environmental policy; safe management of hazardous wastes such as laboratory chemicals, medical wastes, oils, toners containing hazardous substances, waste batteries, and accumulators has been adopted as a fundamental principle. This management system is structured in accordance with current national regulations, especially the Zero Waste Regulation and Waste Management legislation.

To prevent hazardous wastes from mixing into the ecosystem, all wastes are collected separately from other wastes at source and classified in accordance with the legislation. Generated hazardous wastes are



removed from the university site to be disposed of only through licensed and authorized companies. Medical wastes and laboratory-sourced chemical wastes are kept in areas designed in accordance with the legislation during the temporary storage process. Medical waste temporary storage areas are equipped with cooling systems working at +4 °C to ensure waste safety. These wastes are picked up at regular intervals by authorized companies and the disposal process is monitored with official records. Waste batteries and similar hazardous substances are delivered to the TAP Association, the authorized organization, fulfilling legal responsibilities.

The shipment and disposal processes of hazardous wastes are carried out in a transparent and auditable manner through digital monitoring systems. MOTAT records are created for all hazardous wastes sent to licensed facilities and these shipments are regularly reported to the Ministry of Environment, Urbanization and Climate Change. This application shows that the process of hazardous wastes from their exit from the university site to final disposal is officially monitored and recorded. The university's policy for hazardous waste disposal is also clearly and inclusively applied in medical waste management. Medical Waste Acceptance Certificates issued for different campus and application areas such as the Central Campus, Health Campus, Etiler Medical Center, and Feneryolu Medical Center reveal that this policy is a mandatory and standard application across the university. These documents show that medical wastes are regularly delivered to authorized disposal facilities connected to the Istanbul Metropolitan Municipality and the process is carried out under legal guarantee.

Hazardous waste management is not limited to general waste types but also covers substances subject to high risk and special audit. Official disposal documents issued for the destruction of narcotics and controlled drugs reveal that such substances are destroyed within the university not randomly, but in accordance with legal protocols, accompanied by a commission and under minute. This application shows that the university has defined processes even for waste types requiring the highest safety and legal audit in hazardous waste management. There are also strong indirect evidences that the university's hazardous waste disposal processes are carried out in accordance with international standards. The fact that NPİSTANBUL Brain Hospital, the university's partner in scientific and applied health services, has successfully received the JCI (Joint Commission International) Accreditation for the fourth time shows that medical and hazardous waste management processes are operated in accordance with international quality standards. Strict waste management procedures required by JCI standards support the environmental safety approach applied with the same meticulousness in laboratory and application areas where university health and research activities are carried out. This holistic structure clearly reveals that the university handles the disposal of wastes covering hazardous substances not only as a legal obligation but as a priority institutional responsibility in terms of risk management, environmental sustainability, and protection of human health.

Consolidated Evidences and Documents Policy and Official Documents

- Environmental Analysis Report
- Üsküdar University Environmental Policy
- Zero Waste Regulation and Waste Management Legislation

Hazardous and Medical Waste Management

- Medical Waste Acceptance Certificates (Central Campus, Health Campus, Etiler and Feneryolu Medical Centers)
- Hazardous Waste Purchase Contract (Health Campus)

Monitoring and Disposal Records

- MOTAT (Mobile Waste Tracking System) records
- Shipment and delivery documents belonging to licensed disposal companies

Special Waste Types

- Narcotic Drug Destruction Documents
- TAP Association waste battery delivery records



International Standards

- NPİSTANBUL Brain Hospital JCI (Joint Commission International) Accreditation